

Latin Name.	English Name.	Authority †.
82. <i>Ortygometra crex</i> , Temm.	Land-rail.	Mr. Lowe.
83. <i>Fulica atra</i> , Linn.	Coot.	* * *
84. <i>Anser segetum</i> , Steph.	Bean Goose.	* * *
85. <i>Mareca penelope</i> , Selb.	Wigeon.	Mr. Penfold.
86. <i>Anas crecca</i> , Linn.	Teal.	* * *
87. — <i>boschas</i> , Linn.	Mallard.	Mr. Penfold.
88. <i>Sterna nigra</i> , Linn.	Black Tern.	Mr. Lowe.
89. — <i>Dougallii</i> , Mont.	Roseate Tern.	Sir W. Jardine.
90. <i>Larus tridactylus</i> , Lath.	Kittiwake.	* * *
91. <i>Lestris cataractes</i> , Temm.	Skua.	* * *
92. <i>Colymbus glacialis</i> , Linn.	Northern Diver.	* * *
93. <i>Sula alba</i> , Temm.	Gannet.	Mr. Lowe.
94. <i>Procellaria Leachii</i> , Temm.	Leach's Petrel.	Sir W. Jardine.
95. — <i>pelagica</i> , Linn.	Stormy Petrel.	Doubtful.

I have the honour to remain, Sir,

Yours, &c.,

EDWARD VERNON HARCOURT.

BOTANICAL SOCIETY OF EDINBURGH.

May 12, 1853.—Professor Balfour, President, in the Chair.

The following papers were read:—

1. "On the Soap Beans of China," by Dr. Macgowan of Ningpo. This paper contained a popular description, chiefly derived from Chinese authorities, of two species of *Cesalpinia*, which furnish the Soap Bean and the Plump Soap Bean of the Chinese. The Beans have marked saponaceous qualities, and are used as detergents, for cleaning silver vessels, &c.

2. "On the Flora of the Island of Arran," by Dr. Balfour. The author noticed the plants which occur in different districts, in connexion with the rocks. He mentioned that he had observed between 500 and 600 Phanerogamous plants, and 27 Ferns and Equiseta.

3. "On the Colorific properties of the Lichens. Part III. The Manufacture of the Lichen-dyes," by W. Lauder Lindsay, M.D. The author detailed the various processes of manufacture as carried on in different countries, on the large scale (by the manufacturer) and small scale (by the peasant), with the principles on which these are severally founded.

June 9.—Professor Balfour, President, in the Chair.

Dr. Balfour stated that some of the Palms in the Botanic Garden had sent their fronds through the roof of the Palm-House, and that unless measures were taken immediately for making an addition to the house, he would be under the necessity of destroying some of the finest Palms in Britain.

The following are the measurements of some of them. In giving

† Where there are stars it is on my own authority.

the height, the leafy part at the top of the caudex is included, along with the tub in which the plant is growing :—

*Acrocomia aculeata*, 38 feet.

*Areca triandra*, 19 „

*Caryota urens*, 43 „

The frond is 4 feet 9 inches beyond the roof.

*Chamærops humilis* var. *elata*, 20 feet.

*Cocos nucifera* . . . . 18 „

*Euterpe montana* . . . . 38 „

Frond about 2 feet beyond the roof.

*Livistona chinensis*, 40 feet.

Fronds bent down by the roof of the house.

*Sagus Rumphii*, 43 feet.

Fronds about 10 inches beyond the roof.

*Seaforthia elegans*, 22 feet.

Several of them are between fifty and sixty years old.

Dr. Balfour gave an account of a botanical trip to Ireland in August 1852 with some of his pupils.

## MISCELLANEOUS.

*On the Fecundation of the Fucaceæ.* By M. GUSTAVE THURET.

THE physiological functions of the antheridia in the higher Cryptogamia appear to be now pretty well established. It is no longer doubted that they are fecundating organs, and that the antherozoids which they contain are the immediate agents of fecundation, although the action of these upon the female organ or archegonium has not yet been observed.

But as regards the lowest Cryptogamia (Algæ, Fungi, Lichens) the question is much less advanced. The existence of antheridia in these vegetables is a recent discovery, which careful researches will probably extend to all the families of this vast group, but which in the author's opinion cannot be established with certainty until the fecundating power of these organs upon the reproductive apparatus shall be demonstrated.

The author availed himself of his stay at Cherbourg to endeavour to resolve this question as regards the organs designated by M. Decaisne and himself as the antheridia of the Fucaceæ. He considers that the results of his researches furnish the first direct proof of the existence of true sexuality in the lower Cryptogamia.

With this view he has studied the phænomena presented by artificial impregnation. Several species of Fucaceæ are dicecious; when these plants are placed for some time in a damp atmosphere, the spores and the antheridia are pushed out on the surface of the fronds in great numbers; they are then easily collected and deposited in vessels filled with sea-water, or simply in a drop of water on a slip of glass which is protected from evaporation.